



## PROGRAM SPECIFICATION

Faculty of Medicine- Mansoura University

### (A) Administrative information

(1) Programme Title & Code	Postgraduate MD degree of Cardiothoracic Surgery/CSUR 627
(2) Final award/degree	M.D
(3) Department (s)	Cardiothoracic Surgery
(4) Coordinator	Dr.Rami Ahmed Sabri
(5) External evaluator (s)	Prof.Mohamed Abd Elraouf
(6) Date of approval by the Department`s council	28/ 3/2016
(7) Date of last approval of programme specification by Faculty council	9/8/2016

## **(B) Professional information**

### **(1) Programme Aims:**

The broad aims of the Programme are as follows.

- 1- Acquire knowledge and surgical importance of anatomical and pathological principles related to the heart and thoracic structures
- 2- To improve the powers of decision making & problem solving in fields of cardiothoracic surgery.
- 3- To create safe competent cardiothoracic surgeons.
- 4- Demonstrate a rigorous approach to research.
- 5- Be an effective member in a teamwork.

**Within the overall aim, the Objectives of the program are as follows :**

- 1- Define and describe the anatomical relations and congenital anomalies of the heart and thoracic structures and apply its surgical importance.
- 2- Define and describe the pathology of cardiac and thoracic diseases and apply its surgical importance.
- 3- Construct a management plan for patients undergoing thoracic surgery.
- 4- Construct a management plan for patients with aortovascular diseases.
- 5- Construct a management plan for patients undergoing cardiac surgeries whether adult or pediatric cardiac surgery.

### **(2) Intended Learning Outcomes (ILOs):**

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the programme, the candidate will be able to:

## A- Knowledge and Understanding

### Basic knowledge:

A1 Identify and describe the congenital anomalies of the heart and thoracic structures

A2 Discuss the applied anatomy of the heart and thoracic structures with its surgical importance.

A3 Classify and describe the pathological disorders of the heart and thoracic structures with its surgical importance.

A4 Interpret symptomatology of cardiothoracic disorders to their anatomical and pathological principles

A5 List techniques and complications of cardiopulmonary bypass, myocardial protection and mechanical support.

## B- Intellectual skills

B1 Interpret clinical data to diagnose congenital and acquired heart diseases.

B2 Interpret clinical data to diagnose thoracic diseases.

B3 Interpret various investigational and radiological tools to confirm diagnosis.

B4 Analyze Case presentation including history taking, clinical examination, investigations & radiology needed and finally differential diagnosis of the case.

## C- Professional/practical skills

C1 Evaluate and construct a management plan for patients undergoing thoracic Surgery

C2 Evaluate and construct a management plan for patients with aortovascular disease.

C3 Evaluate and construct a management plan for patients undergoing cardiac surgeries whether adult or pediatric cardiac surgeries.

## D- Communication & Transferable skills

D1 Create effective doctor/patient communication.

D2 Make clinical decisions and judgments based upon sound evidence for the benefit of individuals and the population served.

	A1	A2	A3	A4	A5	B1	B2	B3	B4	C1	C2	C3	D1	D2
<b>Objective 1</b>	X	X		X		X	X	X		X	X	X	X	X
<b>Objective 2</b>			X			X	X	X		X	X	X	X	X
<b>Objective 3</b>	X	X	X	X			X	X	X	X			X	X
<b>Objective 4</b>	X	X	X	X	X	X		X	X		X		X	X
<b>Objective 5</b>	X	X	X	X	X	X		X	X			X	X	X

### (3) Academic standards.

Academic standards for the programme are attached in [Appendix I](#). in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used.

### 3- Comparison of the specification to the selected external reference/ benchmark.

- 1) All programme aims of the Benchmark are covered by the current programme.
- 2) Programme courses are covered by 70 %.

### (4) Curriculum structure and contents.

4.a- Duration of the programme (in years or months): 36 months

4.b- programme structure.

Candidates should fulfill a total of 60 credit hours

●4.b.1. Number of credit hours:

First part: 5 Second part: 25( theoretical) Thesis: 15 Logbook: 15

4.b.2: Teaching hours/week: for 15 weeks

**First Part**

Lectures: 5 Clinical/lab:

**Second Part . 25**

**Lectures:**

Semester 1 6

Semester 2 6

Semester 3 6

Semester 4 6

Elective course during the 4<sup>th</sup> semester

1

**(5) Programme courses.**

**First part**

**Compulsory courses.**

Course Title	Course code	NO.of hours per week				Total credit hours	Programme ILOS covered (REFERRING TO MATRIX)
		Theoretical		Practical	Total		
		Lectures	seminars				
Applied Anatomy related the Heart & Chest	CSUR 631 AA	3 hours			3hours	3 hours	A1,2,4
Applied Pathology related the heart & Chest	CSUR 631 AP	2 hours			2 hours	2 hours	A3,4

**Second part**

**Compulsory courses.**

Course Title	Course code	NO.of hours per week				Total credit	Programme ILOS covered
		Theoretical		Field	Total		

		Lectures	seminars	Practical			hours	(REFERRING TO MATRIX)
Thoracic Surgery (extended over 2 semesters)	CSUG 631 TS	12		4	3.5			A1-4 B2-4, C1 D1,2
Cardiac Surgery (extended over 2 semesters)	CSUG 631 CS	12		4	3.5			A1-5 B1,3,4 C2,3 D1,2

### Elective courses .

Course Title	Course code	NO.of hours per week					Total credit hours	Programme ILOS covered (REFERRING TO MATRIX)
		Theoretical		Practical	Field	Total		
		Lectures	seminars					
Cardiac assist device and artificial heart	CADAH 631	1					1	A1,2,3,5
Post-cardiothoracic surgery intensive care	CSUC 631 PCI	1					1	A3,4,5 C1,2,3
Bioengineering in cardiothoracic surgery	CSUC 631 BCS	1					1	A3,4,5

### (6) Scope of the Specialty:

- 1-Critical Care and Postoperative Management.
- 2-Cardiopulmonary Bypass, Myocardial Protection and Circulatory Support.
- 3-Ischaemic Heart Disease.
- 4-Heart Valve Disease.
- 5-Aorto-vascular Disease.

6–Intrathoracic Transplantation and Surgery for Heart Failure.

7–Congenital Heart Disease.

8–Cardiothoracic Trauma.

9–Thoracic Surgery including neoplasms of the Lung, disorders of the Pleura, disorders of the chest wall, disorders of the diaphragm, emphysema and bullae, disorders of the pericardium, disorders of the mediastinum, disorders of the airway and benign & malignant oesophageal diseases.

### Programme–Courses ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2.....etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in [Appendix III](#).

		A1	A2	A3	A4	A5	B1	B2	B3	B4	C1	C2	C3	D1	D2
CSUR 631 AA	Applied Anatomy related the Heart & Chest	X	X		X										
CSUR 631 AP	Applied Pathology related the heart & Chest			x	x										
CSUG 631 TS	Thoracic Surgery	x	x	x	X			X	x	x	x			x	x
CSUG 631 CS	Cardiac Surgery	x	x	x	x	x	x		x	x		x	x	x	x
CSUC 631 PCI	Post-cardiac surgery intensive care			x	x	x					x	x	x		
CSUC 631 BCS	Bioengineering in cardiothoracic surgery			x	x	x									
CADAH 631	Cardiac assist device and artificial heart	x	x	x		x									
Assessment tools															
	Written exam	x	x	x	x	x	x	x	x	x	x	x	x		
	Oral, clinical and practical exams(OSCE)	x	x	x	x	x	x	x	x	x	x	x	x	x	x



**(7) Programme admission requirements.**

● **General requirements.**

- MSc. degree
- Experience in the field according to postgraduate bylaws

**Specific requirements (if applicable)**

none

**(8) Regulations for progression and programme completion.**

Student must complete minimum of 60 credit hours in order to obtain the M.D. degree, which include the courses of first and second parts, thesis and activities of the log book.

- Courses description are included in **Appendix III**.
- Registration for the M.D. thesis is allowed 6 months from the day of admission to the programme and must fulfill a total of 15 credit hours including material collection, laboratory work, patients follow-up, and meetings with supervisors.

**Log book fulfillment.**

- Student must fulfill a minimum of 15 credit of log book activities including clinical training at cardiothoracic department–University hospital, operative work and conferences attendance or speaking.
- Student must present case reports every week.
- Lectures, seminars of the previously described courses and case report must be documented in the log book and signed by the lecturer.
- Works related to thesis must be documented in the log book and signed by the supervisors.
- Any workshops, conferences and scientific meetings should be included in the log book.

**(9) Evaluation of Programme's intended learning outcomes (ILOs).**

Evaluator	Tools*	Sample size
Internal evaluator (s) Prof. Nour Eldeen Noaman Gewely Prof. Salah Eldin Khalaf Prof. Waael Abd Elaziz	Group discussion meetings	
External Evaluator (s) Prof. Mohamed Abd Elraouf	E_mail	
Senior student (s)	Questionnaire	
Alumni	none	
Stakeholder (s)	none	

\* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E\_MAIL

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.

<b>Programme coordinator:</b> <b>Dr. Rami Ahmed Sabri</b>	Signature & date:
<b>Head of Dept.:</b> <b>Prof. Nour Eldeen Noaman Gewely</b>	Signature & date
<b>Dean:</b> <b>Prof. El-Saeed Abd El-Hady</b>	Signature & date:
<b>Executive director of the quality assurance unit:</b> <b>Prof. Dr. Seham Gad El-Hak</b>	Signature & date: